



[4910-13-P]

**DEPARTMENT OF TRANSPORTATION**

**Federal Aviation Administration**

**14 CFR Part 39**

**[Docket No. FAA-2020-0064; Project Identifier 2019-SW-096-AD; Amendment 39-21132; AD 2020-11-07]**

**RIN 2120-AA64**

**Airworthiness Directives; MD Helicopter Inc., Helicopters**

**AGENCY:** Federal Aviation Administration (FAA), DOT.

**ACTION:** Final rule.

**SUMMARY:** The FAA is adopting a new airworthiness directive (AD) for MD Helicopters Inc., (MDHI) Model 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters. This AD was prompted by a report of non-conforming main rotor (M/R) hub lead-lag bolts (bolts). This AD requires removing certain bolts from service. The FAA is issuing this AD to address the unsafe condition on these products.

**DATES:** This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** For service information identified in this final rule, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; or at

<https://www.mdhelicopters.com>. You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0064.

### **Examining the AD Docket**

You may examine the AD docket on the Internet at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2020-0064; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, any comments received, and other information. The address for Docket Operations is Docket Operations, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

**FOR FURTHER INFORMATION CONTACT:** Payman Soltani, Aerospace Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone 562-627-5313; email [payman.soltani@faa.gov](mailto:payman.soltani@faa.gov).

### **SUPPLEMENTARY INFORMATION:**

#### **Discussion**

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to MDHI Model 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters, with certain serial-numbered bolts part number (P/N) 369D21220 installed. The NPRM published in the *Federal Register* on February 7, 2020 (85 FR 7256). The NPRM was prompted by a report of non-conforming

bolts. Certain serial-numbered bolts had an unauthorized repair of their cadmium plating performed between April 2004 and October 2018. Analysis has shown that these bolts have a lower fatigue life compared to bolts used during manufacturing batch testing. The NPRM proposed to require removing the affected bolts from service.

This condition, if not addressed, could result in loss of an M/R blade and subsequent loss of control of the helicopter. The FAA is issuing this AD to address the unsafe condition on these products.

### **Comments**

The FAA gave the public the opportunity to participate in developing this final rule. The FAA received comment from one commenter. The following presents the comment received on the NPRM and the FAA's response to the comment.

### **Request**

The commenter stated that the labor hours provided in the NPRM to replace a bolt are underestimated because bolt replacement cannot be performed while the M/R is installed on the rotorcraft. The cost estimation should include removal of the M/R blades, M/R driveshaft, and M/R head.

The FAA agrees and has updated the Costs of Compliance for this AD.

### **Conclusion**

The FAA reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this final rule as proposed except for adjusting the labor hours to replace a bolt. The FAA has determined that this change:

- Is consistent with the intent that was proposed in the NPRM for addressing the unsafe condition; and
- Does not add any significant burden upon the public than was already proposed in the NPRM.

### **Related Service Information under 1 CFR part 51**

The FAA reviewed MD Helicopters Service Bulletin No. SB369D-223 for Model 369D helicopters, No. SB369E-122 for Model 369E helicopters, No. SB369F-110 for Model 369FF helicopters, No. SB369H-259 for Model 369H, 369HE, 369HS, and 369HM helicopters, No. SB500N-060 for Model 500N helicopters, and No. SB600N-073 for Model 600N helicopters, each dated April 19, 2019. These service bulletins are co-published as one document. This service information specifies determining the serial number of bolt P/N 369D21220, and if certain serial-numbered bolts are installed on a helicopter, contacting MDHI to schedule replacement of each affected bolt and reporting information. This service information also specifies returning removed parts to MDHI along with a completed Service Operation Report.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

### **Differences Between this AD and the Service Information**

The service information specifies reporting information and returning removed parts to MDHI, whereas this AD does not require either of those actions. The service information specifies replacing the affected bolts within 12 months, whereas this AD

requires replacing the affected bolts within three months of the effective date of this AD.

### **Costs of Compliance**

The FAA estimates that this AD affects 767 helicopters of U.S. registry. Labor rates are estimated at \$85 per work-hour. Based on these numbers, the FAA estimates the following costs to comply with this AD.

Replacing a bolt takes about 1.75 work-hours and parts cost about \$178 for an estimated cost of \$327 per bolt.

According to MDHI, some of the costs of this AD may be covered under warranty, thereby reducing the cost impact on affected individuals. The FAA does not control warranty coverage for affected individuals. As a result, the FAA has included all costs in this cost estimate.

### **Authority for this Rulemaking**

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

## **Regulatory Findings**

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

## **List of Subjects in 14 CFR Part 39**

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

## **Adoption of the Amendment**

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

### **PART 39 - AIRWORTHINESS DIRECTIVES**

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

#### **§ 39.13 [Amended]**

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

**2020-11-07 MD Helicopter Inc. (MDHI):** Amendment 39-21132; Docket No. FAA-2020-0064; Project Identifier 2019-SW-096-AD.

**(a) Effective Date**

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**(b) Affected ADs**

None.

**(c) Applicability**

This AD applies to MDHI Model 369D, 369E, 369FF, 369H, 369HE, 369HM, 369HS, 500N, and 600N helicopters, certificated in any category, with a main rotor (M/R) hub lead-lag bolt (bolt) part number (P/N) 369D21220 with a serial number (S/N) listed in paragraph 1.B. of MD Helicopters Service Bulletin No. SB369D-223, SB369E-122, SB369F-110, SB369H-259, SB500N-060, or SB600N-073, each dated April 19, 2019, installed.

**(d) Subject**

Joint Aircraft System Component (JASC): 6200, Main Rotor System.

**(e) Unsafe Condition**

This AD was prompted by a report of non-conforming bolts. The FAA is issuing this AD to prevent failure of a bolt. The unsafe condition, if not addressed, could result in loss of an M/R blade and subsequent loss of control of the helicopter.

**(f) Compliance**

Comply with this AD within the compliance times specified, unless already done.

**(g) Required Actions**

(1) At the next overhaul of the M/R assembly or within 3 months, whichever occurs first, remove from service each bolt with a P/N and S/N listed in paragraph (c) of

this AD.

(2) After the effective date of this AD, do not install on any helicopter a bolt with a P/N and S/N listed in paragraph (c) of this AD.

**(h) Special Flight Permit**

A special flight permit may be permitted for a one-time ferry flight to an authorized repair facility.

**(i) Alternative Methods of Compliance (AMOCs)**

(1) The Manager, Los Angeles ACO Branch, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (j) of this AD. Information may be emailed to: 9-ANM-LAACO-AMOC-REQUESTS@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

**(j) Related Information**

For more information about this AD, contact Payman Soltani, Aerospace Engineer, Los Angeles ACO Branch, FAA, 3960 Paramount Blvd., Lakewood, California 90712; telephone 562-627-5313; email payman.soltani@faa.gov.



**(k) Material Incorporated by Reference**

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) MD Helicopters Service Bulletin (SB) No. SB369D-223, dated April 19, 2019.

(ii) MD Helicopters SB No. SB369E-122, dated April 19, 2019.

(iii) MD Helicopters SB No. SB369F-110, dated April 19, 2019.

(iv) MD Helicopters SB No. SB369H-259, dated April 19, 2019.

(v) MD Helicopters SB No. SB500N-060, dated April 19, 2019.

(vi) MD Helicopters SB No. SB600N-073, dated April 19, 2019.

Note 1 to paragraph (k)(2): MD Helicopters SB No. SB369D-223, No. SB369E-122, No. SB369F-110, No. SB369H-259, No. SB500N-060, and No. SB600N-073, each dated April 19, 2019, are co-published as one document.

(3) For MD Helicopters service information identified in this AD, contact MD Helicopters, Inc., Attn: Customer Support Division, 4555 E. McDowell Rd., Mail Stop M615, Mesa, AZ 85215-9734; telephone 1-800-388-3378; fax 480-346-6813; or at <https://www.mdhelicopters.com>.

(4) You may view this service information at the FAA, Office of the Regional Counsel, Southwest Region, 10101 Hillwood Pkwy, Room 6N-321, Fort Worth, TX 76177. For information on the availability of this material at the FAA, call 817-222-5110.

(5) You may view this service information that is incorporated by reference at the

National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email [fedreg.legal@nara.gov](mailto:fedreg.legal@nara.gov), or go to:

<https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on May 19, 2020.

Gaetano A. Sciortino, Deputy Director for Strategic Initiatives,  
Compliance & Airworthiness Division,  
Aircraft Certification Service.

[FR Doc. 2020-11157 Filed: 5/22/2020 8:45 am; Publication Date: 5/26/2020]